

Presenter Notes



- This presentation is part of a heat illness prevention workshop kit. It covers topics listed in the Heat Stress WRD 11.20:
 - “Safety training should include at a minimum:
 - The environmental and personal risk factors for heat stress;
 - The different types of heat stress and the common signs and symptoms of heat stress
 - The employer’s procedures for identifying, evaluating, and controlling exposure
 - The employer’s procedures for responding to symptoms of possible heat related illness, including a process to summon medical aid personnel.”





To address your specific worksite conditions and your company policies, be sure to add information indicated in slides # 17, 28 & 29.



Working Safely in Hot Environments



This training will cover:

-  What heat illness is and why it is important
-  Symptoms and treatment of heat illness
-  How to prevent heat illness
-  How our company addresses heat illness



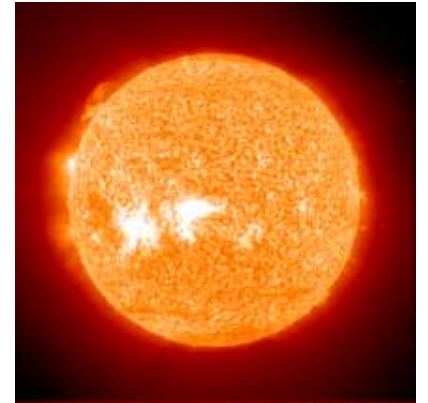
What is heat
illness and why
is it important?

Heat illness is:

- Overheating of the body
- Inability of the body to cool itself

– Why is it important to know about heat illness?

- Heat illness is dangerous
- Heat illness can kill
- Heat illness is preventable



Where does heat illness happen?

- Heat illness can affect anyone, anytime, indoors or outdoors, when it is hot. (usually 90 degrees or more).
- It can happen in logging, foundries, laundries, construction projects, landscaping, agriculture, bakeries, field work, etc.



Photo credit: 6
<http://www.sullys.com.au/LawnMowing.htm>

What increases the risk of heat illness?

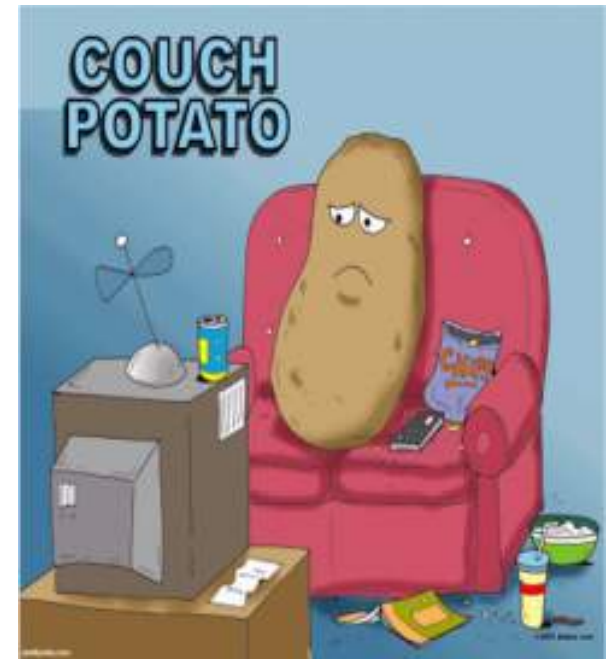
- Physical exertion - how hard you are working
- Working in direct sun or high humidity
- Amount of clothing you are wearing
- Little or no air movement
- Working near hot equipment



What increases the risk of heat illness?

(continued)

- Age, weight, and personal fitness
- Medical conditions
 - Heart conditions
 - Diabetes
 - Etc.
- Certain medications
 - See next slide



Some medications can make you more sensitive to the effects of heat.

- ✓ Allergy medicines (antihistamines)
- ✓ Cough and cold medicines
- ✓ Blood pressure and heart medicines
- ✓ Irritable bladder or bowel medicines
- ✓ Laxatives
- ✓ Mental health medicines
- ✓ Seizure medicines
- ✓ Thyroid pills
- ✓ Water pills (diuretics)



A health care provider or pharmacist can tell you for sure.



What are the
symptoms of
heat illness?

Types of Heat Illnesses

- There are five main kinds of heat illness:

- Heat rash – usually under clothing



- Fainting – can occur when person not used to heat
- Heat cramps – in arms or legs with physical labor
- Heat exhaustion – more serious effect
- Heat stroke – can be fatal



What are the most serious heat illnesses?

Heat exhaustion and Heat stroke



Untreated **heat exhaustion** may progress to **heat stroke**.
Symptoms of either should always be taken seriously

What are the symptoms of heat exhaustion or heat stroke?

- Heavy sweating/moist skin
- Red/flushed, hot skin
- Dehydration
- Exhaustion, weakness
- Fainting/light headed
- Headache
- Nausea or vomiting
- Fast, weak pulse/ shallow breathing
- Panting/rapid breathing
- Clumsiness, dizziness
- Confusion or bizarre behavior
- Irritability
- Convulsions/seizures before or during cooling
- Collapse/fainting



Note: Heat exhaustion or heat stroke may develop over a few days.

Photo credit: www.africaninspace.com

Heat Stroke or Heat Exhaustion?

How do you tell the difference??

The telling difference is mental confusion/disorientation in ALL heat stroke victims.

You can ask these 3 questions.

1. "What is your name?"
2. "What day is this?"
3. "Where are we?"

**If a worker can't answer these questions,
assume it is heat stroke.**



How to Prevent Heat Illness

Proper hydration is key to preventing heat illness

DO

- ✓ Drink plenty of water
- ✓ Drink small amounts frequently
- ✓ Consider using sports drinks
- ✓ Start work well hydrated



DO NOT

- ✓ Drink pop and other sugary drinks
- ✓ Drink lots of coffee and tea
- ✓ Drink alcohol
- ✓ Wait for thirst before drinking water



We will provide drinking water



Photo credit: UC Davis

Describe how water will be provided for workers here



Hydration pack



Worker wearing hydration pack

Preventing heat illness - Work Smart

- ✓ Schedule the hardest work for the cooler parts of the day
- ✓ Alternate heavy work with light work when possible.
- ✓ Take breaks if:
 - conditions are extremely hot; or
 - You are working physically hard;
 - You are wearing protective clothing that limits cooling from sweating
- ✓ Have a “buddy system” to keep an eye on each other for symptoms of heat illness such as confusion or weakness.



Preventing heat illness – adjusting to the heat

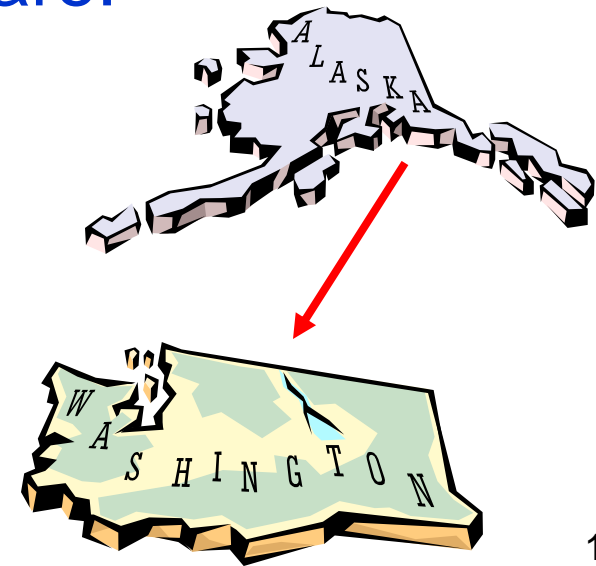
Not being used to the heat

- People need to adjust (acclimate) to hot working conditions over a few days.



You will need to acclimate if you are:

- ✓ a new employee
- ✓ just back from being sick
- ✓ absent for more than two weeks
- ✓ just moved from a cooler climate
- ✓ during any heat waves



Don't fall for these beliefs!

- ✓“I'm tough ~ I don't need a water break”
- ✓“I'm not thirsty ~ I don't need to drink”
- ✓“I'll lose pay if I take a water break”
- ✓“I'll be letting my team down”
- ✓“I'm new here ~ I need to prove myself”



**Don't be a superman – we want you healthy
and productive**

Important!

Stop all activity if you become:

- ✓ Lightheaded
- ✓ Confused
- ✓ Weak
- ✓ Faint
- ✓ Or have a pounding heart or trouble breathing



Take a break and rest in a cool area or shade.

Tell your supervisor if you or one of your coworkers experience these symptoms.



What are the treatments for heat illness?

What do you do if someone is suffering from heat exhaustion?

- ✓ Move person to cooler/shaded area to rest and if possible, lay the worker down.
- ✓ **Do not leave him or her alone.**
- ✓ Loosen and remove heavy clothing that restricts evaporation and cooling.
- ✓ Contact your first aid trained person



What do you do if someone is suffering from heat exhaustion?

If worker is fully alert and not nauseated, provide cool water, or other fluids. (About a cup every 15 minutes).

Fan the person, spray/mist with cool water, or apply a wet cloth to his or her skin but if the worker begins to shiver, stop cooling.

Call 911 if person does not feel better in about 15 minutes.

Do not further expose the person to heat that day. They should rest and continue to drink water or sports drinks.



What do you do if someone is suffering from heat stroke?

- ✓ **Get medical help immediately, call 911 and transport as soon as possible.**

While you are waiting for medical help to arrive:

- ✓ **Move the victim to a cool shaded area**
- ✓ **Remove clothing that restricts cooling.**
- ✓ **Cool down the victim any other way you can**



Heat Stroke - cool the person rapidly using whatever methods you can

For example:

- Immerse the victim in a tub of cool water;
- Place the person in a cool shower;
- Spray the victim with cool water from a garden hose;
- Sponge the person with cool water;
- If the humidity is low, wrap the victim in a cool wet sheet and fan him or her vigorously;
- Apply ice packs under arms and to the groin area.



Remember – to prevent heat illness:

- ✓ Drink water frequently !!
- ✓ Consider sports drinks
- ✓ Know the signs and symptoms of heat related illnesses and take them seriously
- ✓ Avoid alcohol, caffeinated drinks, and heavy meals before or during work.
- ✓ Work smart
- ✓ Acclimate
- ✓ Wear appropriate clothing
- ✓ Take regular breaks
- ✓ Keep an eye on your buddy!



Photo credit: www.csao.org

When heat stress can happen at this worksite

Describe what conditions may lead to heat stress at your worksite here – for example, during the day in the summer in our orchards when the temperature is above 95 degrees, on roofs in Seattle when it is above 90 degrees etc.

Our procedures for contacting emergency medical services

Describe how this is to be done here.



Questions?

